UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,521	05/11/2004	Wen-Sheng Hou	SISP0015USA	3520

27765   7590   12/14/2007
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EXAMINER
PEREZ, JAMES M

ART UNIT	PAPER NUMBER
2611	

NOTIFICATION DATE	DELIVERY MODE
12/14/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/709,521	HOU ET AL.
	Examiner	Art Unit	
	James M. Perez	2611	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 October 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*1-10,12-19,21,23-26 and 28-30*</u> is/are pending in the application.

    4a) Of the above claim(s) <u>*11,20,22 and 27*</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>*1-7,9,12-19,21,23-25 and 29*</u> is/are rejected.

7)☒ Claim(s) <u>*8,10,26,28 and 30*</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>*11 May 2004*</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>9/5/2007</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

Detailed Action

This action is responsive to the amendments filed 10/02/2007. Currently, claims 1-10, 12-19, 21, 23-26, and 28-30 are pending.

Response to Arguments

1.   Applicant's arguments, see page 1, line 23 through page 2, line 11, filed 10/02/2007, with respect to the rejection(s) of claim(s) 1-11 under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Fouche in view the applicant's admitted prior art.

2.   Applicant's arguments with respect to claims 12-19, 21, 23-26, and 28-30 have been considered but are moot in view of the new ground(s) of rejection.

Rejections

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.   Claim 29 recites the limitation "the packet detecting device in claim 27, wherein the determining module further comprises" in claim 29. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1, 3-4, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Fouche (USPN 5271043) in view of the applicant's admitted prior art.

With regards to claim 1, Fouche teaches a method of packet detection, wherein a

receiver receives an input signal, the input signal the method comprising:

obtaining a correlation of the input signal (fig. 11: element 131);

performing convolution on the input signal using a pseudo random code (col. 1,

lines 39-59)

detecting a spike obtained by the convolution and correlation of the received

signal with said code (col. 2, lines 15-20).

Fouche does not explicitly teach the input signal comprising a packet, and the

packet comprising a preamble which comprises a plurality of pseudo-noise (PN) codes,

and detecting a peak power of the input signal.

The applicant's admitted prior art teaches

the input signal comprising a packet, and the packet comprising a preamble

which comprises a plurality of pseudo-noise (PN) codes (fig. 1: paragraph 5); and

detecting a peak power of the input signal after correlation of the input signal

(paragraphs 7 and 9: packet detection method and matching method and peak power

and convolution).

Therefore it would be obvious to one of ordinary skill in the art at the time of the

invention to combine the pseudo random code synchronization method of Fouche with

the packet detection methods disclosed by the applicant's admitted prior art in order to

create an improved system capable of more accurate synchronization and packet

detection in an wireless network.

With regards to claim 3, Fouche in view of the applicant's admitted prior art teaches the

packet detection method in claim 1.

Fouche is silent to determining the periodicity of peaks in the preamble.

The applicant's admitted prior art teaches determining the periodicity and code

matching of the preamble (paragraph 7). It would be obvious to one of ordinary skill in

the art that since the code matching gives the result of peaks in the preamble that the

disclosed periodicity is of the peak of the preamble. Therefore it would be obvious to

one of ordinary skill in the art at the time of the invention that the disclosed periodicity is

the periodicity of the peaks in the preamble (paragraph 7).

With regards to claim 4, Fouche in view of the applicant's admitted prior art teaches the

packet detection method in claim 3.

Fouche in view of the applicant's admitted prior art teaches the determining the

periodicity of the preamble as disclosed in claim 3. Fouche is silent to teaching

performing a convolution for a conjugate of a PN code and the PN codes to generate a

processed preamble.

The applicant's admitted prior art teaches performing a convolution for a

conjugate of a PN code and the PN codes to generate a processed preamble

(paragraphs 7-9).

Therefore it would be obvious to one of ordinary skill in the art at the time of the

invention to combine the pseudo random code synchronization method of Fouche with

the packet detection methods disclosed by the applicant's admitted prior art in order to

create an improved system capable of more accurate synchronization and packet

detection in an wireless network.

With regards to claim 12, Fouche teaches a signal (packet as explained below)

detecting device comprising:

a receiving unit for receiving an input signal (fig. 11: elements 4 and 82);

a convolution operating unit connected to the receiving unit for performing a

convolution of the input signal (fig. 11: element 132: col. 1, lines 39-59);

a correlation calculating module connected (electrically connected) to the

convolution operating unit for obtaining a correlation of the input signal (fig. 11: element

131);

a peak power detecting module connected to the convolution operating unit for

producing synchronization spikes relative to the input signal (col. 2, lines 15-20 and

claims 2-4).

a determining module connected to the correlation calculating module and peak

power detecting module comprising a determining unit which detects the input signal

and determines the input signal's location in time (col. 2, lines 15-20 and claims 2-4).

Fouche does not explicitly teach that the determining unit which determines if the

packet is detected. It would be obvious to one of ordinary skill in the art that the input

signal would contain a data packet which would be detected when input signal is

detected (Fouche: col. 1, lines 18-33). Therefore it would be obvious to one of ordinary

skill in the art at the time of the invention that determining unit would determine if the

packet is detected (Fouche: col. 1, lines 18-33).

Fouche is silent to teaching the input signal comprising a packet and the packet

comprising a preamble; the peak power detecting module detecting a peak power of the

input signal; and the detection

The applicant's admitted prior art teaches

the input signal comprising a packet, the packet comprising a preamble (fig. 1:

paragraph 5);

the peak power detecting module detecting a peak power of the input signal

(paragraphs 7 and 9: packet detection method and matching method and peak power

and convolution); and

Therefore it would be obvious to one of ordinary skill in the art at the time of the

invention to combine the pseudo random code synchronization method of Fouche with

the packet detection methods disclosed by the applicant's admitted prior art in order to

create an improved system capable of more accurate synchronization and packet

detection in an wireless network.

7.   Claims rejected under 35 U.S.C. 103(a) as being unpatentable over Fouche

(USPN 5271043) in view of the applicant's admitted prior art as applied to claim 4

above, and further in view of Uchida (USPN 6366603).

With regards to claim 5, Fouche in view of the applicant's admitted prior art teaches the

packet detection method in claim 4.

     Fouche teaches a correlation of the input signal as disclosed in claim 1.

     Fouche in view of the applicant's admitted prior art are silent to teaching

obtaining a correlation of the processed preamble.

     Uchida teaches obtaining a correlation of the processed preamble (fig. 1:

element 20 and fig. 4a: element 20: col. 4, lines 20-56).

     Therefore it would be obvious to one of ordinary skill in the art at the time of the

invention to combine the pseudo random noise preamble synchronization method of

Fouche in view of the applicant's admitted prior art with the wireless pseudo noise

communication system in order to create an improved system and method for enabling

a wireless network capable of high-speed media access even under unfavorable

electric-wave environment (Uchida: col. 2, lines 40-48).

With regards to claim 6, Fouche in view of the applicant's admitted prior art teaches the

packet detection method in claim 4.

Fouche in view of the applicant's admitted prior art teaches detecting a peak

power of the input signal as disclosed in claim 1.

Fouche in view of the applicant's admitted prior art is silent to teaching detecting

a peak power of the processed preamble.

Uchida teaches detecting a peak power of the processed preamble (fig. 1:

element peak counter: col. 3, lines 9-27).

Therefore it would be obvious to one of ordinary skill in the art at the time of the

invention to combine the pseudo random noise preamble synchronization method of

Fouche in view of the applicant's admitted prior art with the wireless pseudo noise

communication system in order to create an improved system and method for enabling

a wireless network capable of high-speed media access even under unfavorable

electric-wave environment (Uchida: col. 2, lines 40-48).

8.   Claims 2, 7, 9, 13-19, 21, 23-25, and 29 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Fouche in view of the applicant's admitted prior art and further

in view of Seto (US 2004/0247059).

With regards to claim 2, Fouche in view of the applicant's admitted prior art teaches the packet detection method of claim 1.

Fouche in view of the applicant's admitted prior art is silent to teaching filtering the input signal.

Seto teaches filtering the input signal (fig. 1: element 120).

Therefore it would be obvious to one of ordinary skill in the art to combine the preamble synchronization and correlation unit of Fouche with the power calculating method and apparatus of Seto in order to create an improved system with the capability to measure a signal-interference ratio with a high degree of accuracy (paragraph 7).

With regards to claim 7, Fouche in view of the applicant's admitted prior art teaches the packet detection method of claim 1.

Fouche in view of the applicant's admitted prior art are silent to teaching obtaining an average power of the preamble.

Seto teaches obtaining an average power of the midamble (paragraphs 104-111). It would be obvious to one of ordinary skill in the art that the midamble in Seto can be replaced with a claimed preamble since the midamble is used for synchronization purposes (paragraph 8). Therefore it would be obvious to one of ordinary skill in the art to combine the preamble synchronization and correlation unit of Fouche with the power calculating method and apparatus of Seto in order to create an improved system with the capability to measure a signal-interference ratio with a high degree of accuracy (paragraph 7).

With regards to claim 9, Fouche in view of the applicant's admitted prior art teaches the

packet detection method of claim 1.

Fouche in view of the applicant's admitted prior art are silent to teaching

obtaining an average power of noise of the midamble.

Seto teaches obtaining an average power of the midamble (paragraphs 104-

111). It would be obvious to one of ordinary skill in the art that the midamble in Seto

can be replaced with a claimed preamble since the midamble is used for

synchronization purposes (paragraph 8). Therefore it would be obvious to one of

ordinary skill in the art to combine the preamble synchronization and correlation unit of

Fouche with the power calculating method and apparatus of Seto in order to create an

improved system with the capability to measure a signal-interference ratio with a high

degree of accuracy (paragraph 7).

With regards to claim 13, Fouche in view of the applicant's admitted prior art teaches

claim 12.

Fouche teaches a correlation calculating module (fig. 10: element 131).

Fouche is silent to teaching two limitations: Limitation 1) the correlation being

calculated using the preamble, and Limitation 2) a power calculation unit for calculating

the average power of the preamble.

Limitation 1)

The applicant's admitted prior art teaches the correlation being calculating using the preamble (paragraph 8).

Therefore it would be obvious to one of ordinary skill in the art at the time of the invention to combine the pseudo random code synchronization method of Fouche with the packet detection methods disclosed by the applicant's admitted prior art in order to create an improved system capable of more accurate synchronization and packet detection in an wireless network.

Limitation 2)

Seto teaches obtaining a power calculation unit for obtaining an average power of the midamble (paragraphs 104-111). It would be obvious to one of ordinary skill in the art that the midamble in Seto can be replaced with a claimed preamble since the midamble is used for synchronization purposes (paragraph 8). Therefore it would be obvious to one of ordinary skill in the art to combine the preamble synchronization and correlation unit of Fouche with the power calculating method and apparatus of Seto in order to create an improved system with the capability to measure a signal-interference ratio with a high degree of accuracy (paragraph 7).

With regards to claim 14, Fouche in view of the applicant's admitted prior art in further view of Seto teaches the packet detecting device in claim 13.

Fouche teaches the correlation calculating module outputting to a determining module (col. 2, lines 15-20 and claims 2-4).

Fouche in view of the applicant's admitted prior art is silent with respect to the

correlation calculating module further comprises a division unit for dividing the

correlation of the preamble by the average power of the preamble and outputting a

division signal to the determining module.

Seto teaches the correlation calculating module further comprises a division unit

for dividing the correlation of the midamble by the average power of the midamble and

outputting a division signal to the determining module (paragraphs 105-119). It would

be obvious to one of ordinary skill in the art that the midamble in Seto can be replaced

with a claimed preamble since the midamble is used for synchronization purposes

(paragraph 8). Therefore it would be obvious to one of ordinary skill in the art to

combine the preamble synchronization and correlation unit of Fouche with the power

calculating method and apparatus of Seto in order to create an improved system with

the capability to measure a signal-interference ratio with a high degree of accuracy

(paragraph 7).

With regards to claim 15, Fouche in view of the applicant's admitted prior art in further

view of Seto teaches the packet detecting device in claim 13.

Fouche teaches the correlation calculating module outputting to a determining

module (col. 2, lines 15-20 and claims 2-4).

Fouche in view of the applicant's admitted prior art is silent with respect to

teaching the correlation calculating module comprises a multiplication unit for

multiplying the average power of the preamble by a predetermined value and outputting a multiplication signal to the determining module.

Seto teaches correlation calculating module comprises a multiplication unit for multiplying the average power of the midamble by a predetermined value and outputting a multiplication signal to the determining module (paragraphs 105-119). It would be obvious to one of ordinary skill in the art that the midamble in Seto can be replaced with a claimed preamble since the midamble is used for synchronization purposes (paragraph 8). Therefore it would be obvious to one of ordinary skill in the art to combine the preamble synchronization and correlation unit of Fouche with the power calculating method and apparatus of Seto in order to create an improved system with the capability to measure a signal-interference ratio with a high degree of accuracy (paragraph 7).

With regards to claim 16, Fouche in view of the applicant's admitted prior art in further view of Seto teaches the packet detecting device of claim 12.

Fouche in view of the applicant's admitted prior art teaches the peak power detecting module as disclosed in claim 12.

Fouche in view of the applicant's admitted prior art are silent to teaching the peak power detecting module comprises a power calculating unit for obtaining average power of noise of the preamble.

Seto teaches a power calculating unit for obtaining average power of noise of the midamble (paragraphs 105-119). It would be obvious to one of ordinary skill in the art

that the midamble in Seto can be replaced with a claimed preamble since the midamble

is used for synchronization purposes (paragraph 8). Therefore it would be obvious to

one of ordinary skill in the art to combine the preamble synchronization and peak

detecting module of Fouche in view of the applicant's admitted prior art with the power

calculating method and apparatus of Seto in order to create an improved system with

the capability to measure a signal-interference ratio with a high degree of accuracy

(paragraph 7).

With regards to claim 17, Fouche in view of the applicant's admitted prior art in further

view of Seto teaches the packet detecting device in claim 16.

Fouche in view of the applicant's admitted prior art teaches the peak power

detecting module and determining module as disclosed in claim 12.

Fouche in view of the applicant's admitted prior art is silent to teaching the peak

power detecting module further comprises a division unit for dividing the peak power of

the preamble by average power of the noise and outputting a division signal to the

determining module.

Seto teaches comprises a division unit for dividing the peak power of the

midamble by average power of the noise and outputting a division signal to the

determining module (paragraphs 105-119). It would be obvious to one of ordinary skill

in the art that the midamble in Seto can be replaced with a claimed preamble since the

midamble is used for synchronization purposes (paragraph 8). Therefore it would be

obvious to one of ordinary skill in the art to combine the preamble synchronization and

peak detecting module of Fouche in view of the applicant's admitted prior art with the power calculating method and apparatus of Seto in order to create an improved system with the capability to measure a signal-interference ratio with a high degree of accuracy (paragraph 7).

With regards to claim 18, Fouche in view of the applicant's admitted prior art in further view of Seto teaches the packet detecting device in claim 16.

Fouche in view of the applicant's admitted prior art teaches the peak power detecting module as disclosed in claim 12.

Fouche in view of the applicant's admitted prior art is silent to teaching a multiplication unit for multiplying the average power of the noise by a predetermined value and outputting a multiplication signal to the determining module.

Seto teaches a multiplication unit for multiplying the average power of the noise by a predetermined value and outputting a multiplication signal to the determining module (paragraphs 105-119). It would be obvious to one of ordinary skill in the art that the midamble in Seto can be replaced with a claimed preamble since the midamble is used for synchronization purposes (paragraph 8). Therefore it would be obvious to one of ordinary skill in the art to combine the preamble synchronization and peak detecting module of Fouche in view of the applicant's admitted prior art with the power calculating method and apparatus of Seto in order to create an improved system with the capability to measure a signal-interference ratio with a high degree of accuracy (paragraph 7).

With regards to claim 19, Fouche in view of the applicant's admitted prior art in further view of Seto teaches the packet detecting device in claim 14.

Fouche in view of the applicant's admitted prior art teaches the peak power detecting module and determining module as disclosed in claim 12.

Fouche in view of the applicant's admitted prior art is silent to teaching the peak power detecting module comprises a power calculating unit for obtaining average power of noise of the preamble.

Seto teaches a power calculating unit for obtaining average power of noise of the midamble (paragraphs 105-119). It would be obvious to one of ordinary skill in the art that the midamble in Seto can be replaced with a claimed preamble since the midamble is used for synchronization purposes (paragraph 8). Therefore it would be obvious to one of ordinary skill in the art to combine the preamble synchronization and peak detecting module of Fouche in view of the applicant's admitted prior art with the power calculating method and apparatus of Seto in order to create an improved system with the capability to measure a signal-interference ratio with a high degree of accuracy (paragraph 7).

With regards to claim 21, Fouche in view of the applicant's admitted prior art in further view of Seto teaches the packet detecting device in claim 19.

Fouche in view of the applicant's admitted prior art teaches the peak power detecting module as disclosed in claim 12.

Fouche in view of the applicant's admitted prior art is silent to teaching the peak power detecting module further comprises a division unit for dividing the peak power of the preamble by average power of the noise and outputting a division signal to the determining module.

Seto teaches comprises a division unit for dividing the peak power of the midamble by average power of the noise and outputting a division signal to the determining module (paragraphs 105-119). It would be obvious to one of ordinary skill in the art that the midamble in Seto can be replaced with a claimed preamble since the midamble is used for synchronization purposes (paragraph 8). Therefore it would be obvious to one of ordinary skill in the art to combine the preamble synchronization and peak detecting module of Fouche in view of the applicant's admitted prior art with the power calculating method and apparatus of Seto in order to create an improved system with the capability to measure a signal-interference ratio with a high degree of accuracy (paragraph 7).

With regards to claim 23, Fouche in view of the applicant's admitted prior art in further view of Seto teaches the packet detecting device in claim 17.

Fouche in view of the applicant's admitted prior art teaches the peak power detecting module and determination module as disclosed in claim 12 and the division module is taught in claim 17.

Official note is taken that comparison unit for comparing the peak power with a predetermined value (threshold) is well known and expected in the art.

Therefore it would be obvious to one of ordinary skill in the art at the time of the invention to compare the determined peak power with a threshold value in order to differentiate expected signals from noise or interference.

Seto teaches comprises a division unit for dividing the peak power of the midamble by average power of the noise and outputting a division signal to the determining module (paragraphs 105-119). It would be obvious to one of ordinary skill in the art that the midamble in Seto can be replaced with a claimed preamble since the midamble is used for synchronization purposes (paragraph 8). Therefore it would be obvious to one of ordinary skill in the art to combine the preamble synchronization and peak detecting module of Fouche in view of the applicant's admitted prior art with the power calculating method and apparatus of Seto in order to create an improved system with the capability to measure a signal-interference ratio with a high degree of accuracy (paragraph 7).

With regards to claim 24, Fouche in view of the applicant's admitted prior art in further view of Seto teaches the packet detecting device in claim 14.

Fouche in view of the applicant's admitted prior art teaches the correlation module and determination module as disclosed in claim 12 and the division module is taught in claim 17.

Official note is taken that comparison unit for comparing the peak power with a predetermined value (threshold) is well known and expected in the art.

Therefore it would be obvious to one of ordinary skill in the art at the time of the invention to compare the correlation signal with a threshold value in order to differentiate expected signals from noise or interference.

Seto teaches comprises a division unit for dividing the peak power of the midamble by average power of the noise and outputting a division signal to the determining module (paragraphs 105-119). It would be obvious to one of ordinary skill in the art that the midamble in Seto can be replaced with a claimed preamble since the midamble is used for synchronization purposes (paragraph 8). Therefore it would be obvious to one of ordinary skill in the art to combine the preamble synchronization and peak detecting module of Fouche in view of the applicant's admitted prior art with the power calculating method and apparatus of Seto in order to create an improved system with the capability to measure a signal-interference ratio with a high degree of accuracy (paragraph 7).

With regards to claim 25, Fouche in view of the applicant's admitted prior art in further view of Seto teaches the packet detecting device in claim 15.

Fouche in view of the applicant's admitted prior art teaches the correlation module and determination module as disclosed in claim 12 and the division module is taught in claim 17.

Official note is taken that comparison unit for comparing the peak power with a predetermined value (threshold) is well known and expected in the art.

Therefore it would be obvious to one of ordinary skill in the art at the time of the invention to compare the correlation signal with a threshold value in order to differentiate expected signals from noise or interference.

Seto teaches comprises a division unit for dividing the peak power of the midamble by average power of the noise and outputting a multiplication signal to the determining module (paragraphs 105-119). It would be obvious to one of ordinary skill in the art that the midamble in Seto can be replaced with a claimed preamble since the midamble is used for synchronization purposes (paragraph 8). Therefore it would be obvious to one of ordinary skill in the art to combine the preamble synchronization and peak detecting module of Fouche in view of the applicant's admitted prior art with the power calculating method and apparatus of Seto in order to create an improved system with the capability to measure a signal-interference ratio with a high degree of accuracy (paragraph 7).

With regards to claim 29, Fouche in view of the applicant's admitted prior art in further view of Seto teaches the packet detecting device in claim 12.

Fouche further teaches the determining module further comprises a determining unit for determining if the packet arrives relative to a comparison (col. 2, lines 15-20 and claims 2-4).

Allowable Subject Matter

9.   Claims 8, 10, 26, 28, and 30 are objected to as being dependent upon a rejected

base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to James M. Perez whose telephone number is 571-270-

3231. The examiner can normally be reached on Monday through Friday: 9am to 5pm

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

DAVID C. PAYNE
SUPERVISORY PATENT EXAMINER

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JP
12/10/2007

DAVID C. PAYNE
SUPERVISORY PATENT EXAMINER